

LISTING OF AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double brackets indicating deletions.

Listing of Claims

1. (Currently Amended) A method of recognizing speech in systems that accept speech input, comprising:

(a) receiving at least a current subgroup of speech units that form part of a complete speech sequence that is to be input from a user, the complete speech sequence being embodied as at least one of a word and a password comprised of a plurality of alphanumeric characters, the subgroup being one or more alphanumeric characters of the complete speech sequence;

(b) detecting a natural pause between input subgroups such that a pause between two alphanumeric characters in a given subgroup or a pause between one alphanumeric character and a subgroup are detected;

(c) recognizing the speech units of the subgroup to provide a recognition result; and

(d) immediately feeding back the recognition result for verification by the user, wherein the recognition result is interrupted by the user prior to being fed back for verification.

2. (Original) The method of claim 1, wherein said user is only prompted to repeat said subgroup for re-recognition and re-verification if a rejection criteria is met.

3. (Original) The method of claim 1, further comprising:

(e) repeating steps (a) to (d) for remaining input until it is determined that the complete speech sequence has been recognized.

4. (Original) The method of claim 1, wherein step (d) is effected using pre-recorded prompts or via text-to-speech synthesis, (TTS) to feedback the recognition result.

5. (Original) The method of claim 2, wherein said rejection criteria is embodied as a negative utterance spoken by the user after receiving the fed back recognition result.

6. (Original) The method of claim 2, wherein said rejection criteria is embodied as a negative utterance spoken by the user concurrent with inputting the subgroup that is recognized in step (c).

7. (Original) The method of claim 2, wherein if said rejection criteria are met repeatedly, the user is prompted to speak the subgroups in smaller groups of speech units.

8. (Original) The method of claim 7, wherein said prompt to speak subgroups in smaller groups of speech units provides a built in training mechanism for the user.

9. (Original) The method of claim 2, wherein if said rejection criteria are met repeatedly, the user is prompted to use a dial pad to enter the speech units.

10. (Previously Presented) The method of claim 1, wherein said speech units are selected from any of spoken digits and spoken letters.

11. (Original) The method of claim 1, wherein input of a next subgroup after receiving the fed back recognition result indicates a correct recognition of the currently input subgroup.

12. (Original) The method of claim 2, wherein said rejection criteria requires determining a level of confidence in said recognition result.

13. (Currently Amended) An automatic speech recognition system, comprising:

a receiver for receiving at least a current subgroup of speech units that form part of a complete speech sequence that is to be input by a user, the complete speech sequence being embodied as at least one of a word and a password comprised of a plurality of alphanumeric characters, the subgroup being one or more alphanumeric characters of the complete speech sequence;

a detector for detecting a natural pause after receiving the alphanumeric characters;

a speech recognition unit for detecting a natural pause between input subgroups to output a recognition result representative of the current subgroup such that a pause between two alphanumeric characters in a given subgroup or a pause between one alphanumeric character and a subgroup are detected; and

a controller for evaluating the output recognition result and feeding back the recognition result to the user, wherein the recognition result is interrupted by the user prior to being fed back for verification.

14. (Original) The system of claim 13, wherein said user is only prompted to repeat said subgroup for re-recognition and re-verification if a rejection criteria is met.

15. (Original) The system of claim 13, wherein the speech recognition unit compares the input subgroup with stored recognition grammar in order to determine the recognition result.

16. (Original) The system of claim 15, wherein the recognition grammar is stored in a remote memory accessible by the speech recognition unit.

17. (Original) The system of claim 14,
wherein the recognition result includes at least one of a subgroup of speech
units and a negative utterance representation that is included in the recognition result,
and
wherein the rejection criteria is met if the negative utterance is included
therein.

18. (Original) The system of claim 14, wherein said rejection criteria is
met if the user speaks a negative utterance after receiving the fed back recognition
result.

19. (Original) The system of claim 14, wherein said rejection criteria is
met if the user speaks a negative utterance while inputting the current subgroup, so
that said recognition result includes the negative utterance.

20. (Original) The system of claim 14, wherein the system remains active
to process subsequent subgroups until it is determined that the complete speech
sequence has been recognized.

21. (Original) The system of claim 13, wherein said controller accesses
pre-recorded prompts or a text-to-speech synthesis processor in order to effect
feedback of the recognition result to the user.

22. (Original) The system of claim 14, wherein if said rejection criteria is
met repeatedly, said controller prompts the user to speak the subgroups in smaller
groups of speech units.

23. (Original) The system of claim 22, wherein said prompt to speak
subgroups in smaller groups of speech units provides a built in training mechanism
for the user.

24. (Original) The system of claim 14, wherein if said rejection criteria is met repeatedly, said prompt generator prompts the user to use a dial pad to enter digits corresponding to the speech units.

25. (Original) The system of claim 13, wherein said speech units are selected from any of spoken digits, spoken letter and spoken words.

26. (Original) The system of claim 13, wherein input of a next subgroup after receiving the fed back recognition result indicates a correct recognition of the currently input subgroup.

27. (Previously Presented) The system of claim 13, wherein said speech recognition unit determines a confidence level for said recognition result.

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END OF CLAIM LISTING